

## STERILE VASCULAR ACCESS KIT

### CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of U.S. Provisional Patent Application Ser. No. 61/064,683, filed Mar. 19, 2008.

### BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present invention generally relates to medical devices, and more particularly to a sterile vascular access kit containing sterile supplies for use in accessing a Mediport or implanted central venous catheter in order to draw blood or to administer medications, such as antibiotics, chemotherapy, IV fluids and blood products.

[0004] 2. Description of the Related Art

[0005] Many patients have conditions that require the administration of IV fluids or require frequent blood testing of various labs, such as complete blood count, electrolyte levels, medication levels, etc., to determine that therapeutic medication dosages have been achieved and the patient ready for continued treatments or changes in their care plan. Instead of accessing a new IV site every time fluid administration or blood testing is required, such patients have a surgically implanted central venous device such as a Mediport placed.

[0006] While such devices simplify access to the vein, the port presents a potential site where infection may develop whenever the port is accessed. In order to reduce the risk of infection, and to ensure the proper administration of fluids or taking of blood samples, the nurse or health care provider requires several medical appliances or items of equipment. The process of gathering the equipment may take time, and when the health care provider is pressed for time, there may be a temptation to use appliances that have not been properly sterilized, or to omit some steps entirely if the equipment is not readily at hand. There is also the potential to contaminate a sterile field during set up of supplies by opening many individual contents and placing them on the field as well as drawing up Saline and Heparin with sterile technique. This situation may be frequently encountered in hospitals, in nursing homes, among emergency medical technicians, and among visiting home health care practitioners.

[0007] Thus, a sterile vascular access kit solving the aforementioned problems is desired.

### SUMMARY OF THE INVENTION

[0008] The sterile vascular access kit contains sterile supplies needed to access an implanted vascular device, such as a Mediport, which is employed to obtain blood samples and for giving frequent intravenous (IV) medication over a period of time, up to seven days before changing the access needle. As indicated above, the kit contains all the medical supplies needed to accomplish the vascular access procedure, thereby eliminating the need to locate and gather such medical supplies.

[0009] The medical supplies include a facemask and gloves, compatible for administering chemotherapy. Tegaderm/sterile occlusive dressing for providing an enclosure over the needle accessed site, a needleless fluid transfer device, an injection cap, syringes containing normal saline for flushing the tubing, an empty syringe for drawing blood, and preferably a syringe of Heparin or anticoagulant for flushing the

tubing and implanted central line after each use and prior to each de-access of the implanted device. The kit also contains sponges, sterile adhesive strips, and Chloraprep for cleansing the site of access.

[0010] Accordingly, the invention presents an all-inclusive vascular access kit that is compactly designed and sealed to prevent contamination of the supplies contained therein. The invention provides for improved elements thereof in an arrangement for the purposes described that are inexpensive, dependable and fully effective in accomplishing their intended purposes.

[0011] These and other features of the present invention will become readily apparent upon further review of the following specification and drawings.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0012] FIG. 1 is a perspective view of a sterile vascular access kit according to the present invention.

[0013] FIG. 2 is a detailed, perspective view of the contents of a sterile vascular access kit according to the present invention.

[0014] Similar reference characters denote corresponding features consistently throughout the attached drawings.

### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0015] Attention is first directed to FIG. 1, wherein a sterile vascular access kit is generally indicated at 10. The kit 10 includes a storage tray 12 housing all essential medical items needed to access an implanted venous device. Tray 12 is wrapped in a blue CSR (Central Service Room) wrap 16 and further enclosed in an easily removable, fluid-impervious sealing material 14. Kit 10 is compact and can be conveniently stored.

[0016] The contents of kit 10 are best shown in FIG. 2. The contents include the above-mentioned blue CSR wrap 16, a facemask 18, a 4"×4¾" Tegaderm™ dressing 20 (Tegaderm is a product of Minnesota Mining & Manufacturing [3M] Company of St. Paul, Minn., referring to a polyurethane film sheet with an adhesive layer, the sheet being porous to air but providing a barrier against bacterial infection), Chloraprep Onestep 22 and two (2"×2"), non-woven, split, sponges 26. A pair of wrapped, cuffed latex or other suitable gloves 28 is also available in the kit. Other essential items are a needleless blood or fluid transfer device 30, two (4"×4") non-woven cover sponges 32, three (½"×4") steri strips 34, a needleless injection cap 44, and four alcohol prep pads 35.

[0017] There are five syringes included in the kit 10. Two 10 ml syringes 36 and 40, each contain 10 ml of normal saline solution, which is the recommended flushing protocol for adult Mediports. One syringe 37 contains only 5 ml normal saline solution used to prime the tubing of the access needle. An empty syringe 38, e.g., a 10 ml syringe, is available for collecting a blood sample. The last syringe 42 is made available to contain an anticoagulant, such as heparin, for flushing the port. Preferably, a 10 ml syringe containing about 3 ml of heparin (1:100 units/ml-pediatric dose) or 5 ml (1:100 units/ml-adult dose) is included in the kit 10 if the heparin can be kept stable during the expected storage period. Otherwise, a second empty 10 ml syringe may be provided for the administration of heparin. The heparin would need to be drawn up with one-handed sterile technique or have a second health